

REMARKS

Applicants thank the Examiner for a thorough review of the present application. Pending Claims 7-11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,212,389 to Fapojuwo (hereinafter the "Fapojuwo reference") in view of U.S. Patent 5,537,411 to Plas (hereinafter the "Plas reference"). In light of the remarks presented below, Applicants respectfully request reconsideration and allowance of Claims 7-11.

Regarding independent Claim 7, Applicants note that the Office Action provides that the Fapojuwo reference does not teach "(b) the connection between the local exchange, or mobile switching centre, and the plurality of cell site switches is in the form of a common bus to which each of the local exchange, or mobile switching centre, and the plurality of cell site switches is directly connected; and (c) the connection between each cell site switch and its cluster of base station transceivers is in the form of a common bus to which the pertaining cell site switch and base station transceivers are directly connected; whereby the network forms a hierarchial system in which the bus enables localisation of signalling to specific buses thereby reducing the signalling load in the local exchange, or mobile switching centre and, in each cluster the specific bus provides a fast signalling path which enables resources to be allocated between the base station transceivers as required to maintain a desired quality of service" as recited in Claim 7. Indeed, Applicants submit that the Fapojuwo reference does not teach or suggest these limitations.

The Plas references describes an access network for a mobile radiotelephony network that includes a dual bus that is connected to an access point and several base stations. Applicants submit, however, that the Plas references does not disclose a network in which a plurality of cell site switches are provided. Nor does the Plas reference describe a network with a plurality of cell site switches where each cell site switch is connected between a high level common bus and one of a plurality of low level common buses being connected to a cluster of base stations associated with the corresponding cell site of the cell site switch. Rather, the Plas reference describes individual base stations being connected directly to a dual bus or connected to the dual

bus via a concentration node (*see, e.g.*, col. 2, lines 35-38; col. 4, lines 7-10) and that the dual bus is connected directly to the access point (*see, e.g.*, col. 4, lines 14-16).

Further, the Plas reference teaches away from a high level common bus and a low level common bus. The Plas reference also teaches away from a plurality of cell site switches. Instead, the Plas reference teaches that local mobile networks may be interconnected either by direct connection to the access point (P_A) or by direct connections between dual buses through a passageway (P_a). *See* col. 4, lines 19-20. And cell site switches are not included in the network architecture described in the Plas reference. Accordingly, the Plas reference does not teach or disclose “(b) the connection between the local exchange, or mobile switching centre, and the plurality of cell site switches is in the form of a common bus to which each of the local exchange, or mobile switching centre, and the plurality of cell site switches is directly connected” as recited in Claim 7. This distinction between the claims to the present invention and the prior art, including the Plas reference, is not immaterial.

The Plas reference teaches a single-stage bus architecture. By comparison, the two-stage bus architecture of the present invention allows for the dynamic allocation of resources at two different levels. The higher-level bus provides a means for localizing signaling to different cell sites, thereby reducing the signaling load in the local exchange, or mobile switching center. The lower-level buses provide fast signaling paths to resources within their associated clusters. This allows resources to be quickly and dynamically allocated between the base station transceivers as required to maintain a desired quality of service, without increasing the signal load on the local exchange. This two-stage architecture is neither taught nor suggested in any of the prior art of record.

The Plas reference also teaches away from a “connection between each cell site switch and its cluster of base station transceivers [] in the form of a common bus to which the pertaining cell site switch and base station transceivers are directly connected” as recited in Claim 7. Rather, the Plas reference teaches that base stations may be connected to the dual bus indirectly by means of a concentration node (ND). *See* col. 4, lines 7-10.

The Applicants respectfully submit that it would not have been obvious, as stated in the Office Action, to include a connection that is in the form of a common bus to which each of the

local exchange, or mobile switching center, and the plurality of the cell site switches is directly connected. Rather, as described above, the Plas reference teaches away from a high level common bus and does not include a plurality of cell site switches.

The Applicants also respectfully submit that it would not have been obvious, as stated in the Office Action, to include a bus that enables localization of signaling to specific buses thereby reducing the signaling load in the local exchange, or mobile switching center. Rather, as described above, the Plas reference teaches away from a high level common bus by teaching that local mobile networks may be interconnected either by direct connection to the access point (P_A) or by direct connections between dual buses through a passageway (P_a). *See* col. 4, lines 19-20.

In view of the foregoing comments, Applicants submit that there is no teaching in the Plas reference that would lead one of ordinary skill in the art from the teachings of the Fapojuwo reference to the present invention. Accordingly, Applicants submit that independent Claim 7, and the claims depending therefrom, include recitations which patentably distinguish the claimed invention over the cited references.

Regarding dependent Claims 10 and 11, in addition to the reasons stated above with respect to independent Claim 7 from which Claims 10 and 11 depend, Applicants submit that neither the Fapojuwo reference nor the Plas reference, nor the combination thereof, teach or suggest a common bus interconnecting cell site switches and the local exchange, or mobile switching center. Applicants, therefore, further submit that neither the Fapojuwo reference nor the Plas reference, nor the combination thereof, teach or suggest that such a common bus is a generic transmission medium or a distributed queue dual bus network.

For the reasons provided above, Applicants respectfully submit that the rejections of independent Claims 7-11 under 35 U.S.C. § 103(a) should be withdrawn.

Conclusion

In view of the foregoing remarks, Applicants respectfully submitted that the present claims are in condition for allowance. It is, therefore, respectfully requested that a Notice of Allowance be issued. Examiner Miller is encouraged to contact Applicants' undersigned attorney to resolve any remaining issues in order to expedite examination of the present

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invention.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,




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